

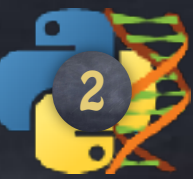
Introduction to



– with Application to Bioinformatics

**NBS**

→ Notebook 6



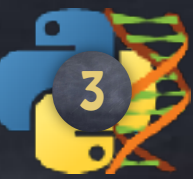


# Formatting Strings

```
'Some string with formatting instructions'.format(some, values, to, fill, in)
```

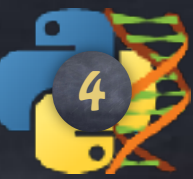
```
'The "{} little {}" is a nice {}'.format(3, 'pigs', 'story')
```

0,1,2: positions  
or keyword names : attributes



# Regular Expressions

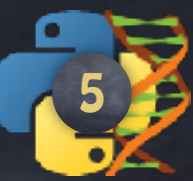
Full Language





# Regular Expressions

- \* Search online for description
- \* Learn how to describe the patterns we search for with that language
- \* Use Python to do the ground work



## Summing up

Level 1

Level 2

Level 3

Level 4

Syntax

Constructs

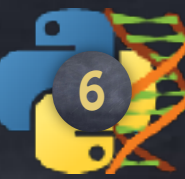
Logic

Craft

Notebooks

Class exercises

Your assignment





Lexer

Parser

Control Flow

if / else  
break, continue

Builtin Functions

min, max, len, type, help  
sum, round, open

Literals

Variables

Indentation

Functions

Builtin Types

Arguments

int, float, str, list, tuple,  
range, set, dict, IOFile,

I/O

positional, keywords

Scoping

Iteration

Modules

list, sequence, range,  
dict.keys(), dict.values()  
dict.items(), file

stdLib

import

str.split(), str.join()  
list.append(), dict.get

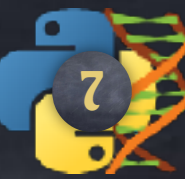
String Formatting

Boolean Operations

and, or, not

== vs is

RegExp





Read `book_chapter.txt` into Python, line by line,  
Print the first 50 characters of each line, appending  
an ellipsis ... at the end, if necessary.

Find the best movie

Find the first drama movie  
over 8.7  
under 2h

Find the movie

CFTR

-

Find the category

Patient at risk

omeDB

For the category "Adventure",  
find both:

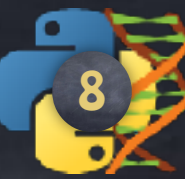
- the top movie
- the flop movie

- Cheapest home around
- Most expensive/m<sup>2</sup>

Count Lines/Words/Chars

Find RXLR...EER

Rewrite the file in this other format







Bravo!

Well Done!